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Saurwein, Florian ; Just, Natascha ; Latzer, Michael ; Metreveli, Sulkhan

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# **A skeptical citizen's view of digital democratization: Switzerland in the international context**

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**Key Words:** Internet, politics, digital democratization, digital democracy, e-democracy, political participation, Switzerland, survey, international comparison

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## **Introduction**

The diffusion of new information and communications technologies (ICTs) is accompanied by considerations on their democratic impact. ICTs in general, the Internet in particular, and most recently social media have driven the development of conceptions like electronic democracy, digital democracy and cyber-democracy, which typically denote the potential of ICTs to influence democratization, e.g., by increasing the transparency of the political process, enhancing citizens' direct involvement and participation, or improving the quality of opinion formation by opening new spaces for information and deliberation (Trechsel et al. 2003, 3). While the quality of democracy may be promoted and strengthened by the diffusion of new ICTs, the 'social shaping' of technology (Bijker and Law 1992) is also often recognized in this context. The exploitation of technological potentials in practice depends heavily on cultural, social, political and economic factors. 'Technology is an enabler not the solution' (OECD 2003, 8).

Many have underlined the enabling potential of the Internet to strengthen democracy. For example, the role of social media for citizen empowerment in the 'Arab Spring' (Howard and Hussain 2011) or the contribution of online-platforms like Wikileaks to increase political transparency. Dutton (2009) argues that the Internet crucially enables individuals to network in new ways that reconfigure and enhance their communicative power – as a type of 'Fifth Estate.' Chadwick (2009, 27) highlights the low threshold for co-production behaviour characteristic of Web 2.0, which provides new value in online consultation and public policy-making. Coleman (2005, 177) stresses the potential for a more dialogical and deliberative democracy, and Karakaya Polat (2005, 453) states that the Internet could potentially enable a situation of perfect knowledge in which citizens know all about policy issues. Further, experiments with users suggest that highly interactive and personalized online communication

by politicians and parties may increase citizens' political involvement (Kruikemeier et al. 2013).

Despite such promising visions and examples, several scholars argue that the actual progress in exploiting existing potentials for democratization has thus far not caught up with the high expectations. Van Dijk (2009, 36), for example, reports a marginal influence of e-participation projects on policy and politics. Online activism is further criticized as being nothing more than slacktivism, i.e., activities that may make the active individual feel good but have little impact on political decisions and may even distract citizens from other more effective forms of engagement (Christensen 2011).

Scholars have identified various reasons that inhibit progress in the process of electronic democratization (e.g., Coleman and Norris 2005; Smith et al. 2009). The resistance of political actors is an important and prominent reason. Although the Internet plays an increasing role in political (e.g., electoral) campaigns (Lilleker and Malagón 2010), studies show that political decision-makers often regard technology as an enabler of improved top-down information and public administration rather than of bottom-up involvement and related changing democratic processes. Elected representatives often oppose more civic engagement as this might reduce their power and weaken political representation (Mahrer and Krimmer 2005, 39f). Hindman (2009) argues that online speech shows winner-takes-all patterns and that the Internet has done little to broaden political discourse, but rather empowers a small set of well-established and new elites. It is argued, however, that the failure to find relevant impacts of ICT on politics is rooted in the traditional ideas of politics, which need to be reconceptualized in order to identify the possible contributions that have occurred outside the formal political arena in social movements, civil associations, and discussion groups, which are indicators of 'life politics' or 'sub-politics' (Bentivegna 2006).

Beyond these general perspectives on the interrelations of new media and democracy, more empirical work on concepts and patterns of online political engagement has recently been conducted. What factors promote or inhibit peoples' online engagement and does the Internet enlarge the circle of engaged people beyond those who already participate in politics offline? In general, it is often stated that only a small proportion of Internet users use technology as a means for participating in politics or as a channel for reaching governments (Dutton and Blank 2011, 30). For explaining differences in political engagement established theories of political participation emphasize the role of motivation, capacity, mobilization and institutional dispositions (Karakaya Polat 2005).

Another strand of research explores the role of media for democracy by analysing media usage patterns and their influence on political knowledge, interest and participation (Eveland and Scheufele 2000; Hollander 2007; Jennings and Zeitner 2003; Boulianne 2009; 2011; Moeller and de Vreese 2013; Holt et al. 2013). This research has shown that exposure to news media has a positive influence on political interest and political involvement (Moeller and de Vreese 2013, 313; Strömbäck and Shehata 2010; Newton 1999; Norris 2003), and that Internet access has positive effects on several indicators of civic engagement (Jennings and Zeitner 2003).

Altogether, with the rapid diffusion of the Internet the causal and explanatory links between the 'Internet and political transformation' (Bimber 1998; 1999), 'between technology and politics' (Weare 2002) and 'between the Internet and political participation' (Karakaya Polat 2005) have also attracted a lot of scholarly attention. Related to peoples' 'actions,' i.e. de-facto participation, peoples' 'attitudes' towards electronic democratization also matter. Do people believe that the Internet enhances democratic standards? Do they think that their online engagement has an impact on politics? Data from the USA, for instance, reveal that citizens believe that using the Internet has only limited impact on creating more say for

individuals in their government or giving voters more political power (USC Annenberg School Center for the Digital Future 2012, 11).

This paper further investigates the impact of the Internet on the quality of democracy by focusing on political participation and on peoples' belief in digital democracy. It proceeds as follows: The first section explores the preconditions for digital democratization in Switzerland by giving an overview of basic data regarding Internet penetration, citizens' interest in politics and the state of political participation, which are derived from representative national survey data. The second section analyses citizens' perception of electronic democratization in Switzerland. The results indicate considerable scepticism regarding the Internet's impact on the quality of democracy. In order to contextualize and interpret the Swiss results, the third section introduces a Perception of Digital Democratization Index that compares 18 countries and puts the results from Switzerland into an international context. The results confirm the general impression of widespread scepticism regarding digital democratization in Switzerland. Additionally, they identify the more optimistic countries and pose new questions regarding the reasons for the differences between countries. Finally, the fourth section takes a first step in exploring the reasons behind the evident Swiss scepticism regarding digital democratization. For this purpose, it analyses the representative survey data from Switzerland by using logistic regression in order to test a first set of explanatory factors.

## **1. Preconditions for digital democratization: access, interest and involvement**

Digital democratization is a process that depends on support by the political system, citizens and technology. On the part of citizens it depends, among other things, on access to the Internet, interest in politics and readiness for active political participation. A look at these

factors in Switzerland reveals that the basic conditions for digital democratization are good, however, with some noteworthy obstacles to full development.

### Access to the Internet

Switzerland scores well regarding Internet access, with comparatively high Internet penetration (Latzer et al. 2012a).<sup>1</sup> More than three-quarters (77%) of the Swiss population (14+) were using the Internet in 2011. With this *penetration* rate, Switzerland is in the upper third of countries by international comparisons. On average, Swiss Internet users have been online for 10.5 years. The penetration of private Internet connections in Switzerland is high. 97% of Internet users access the Internet at home. 43% use the Internet at work, corresponding to a third of the population (33%), and more than half (55%) of Swiss employees. Three-quarters of those who use the Internet at home have a broadband connection. 26% of Internet users access mobile Internet en route. Within a short period of time the smartphone has become the number one access device for mobile Internet, with 54% of mobile Internet users accessing the Internet via smartphone.

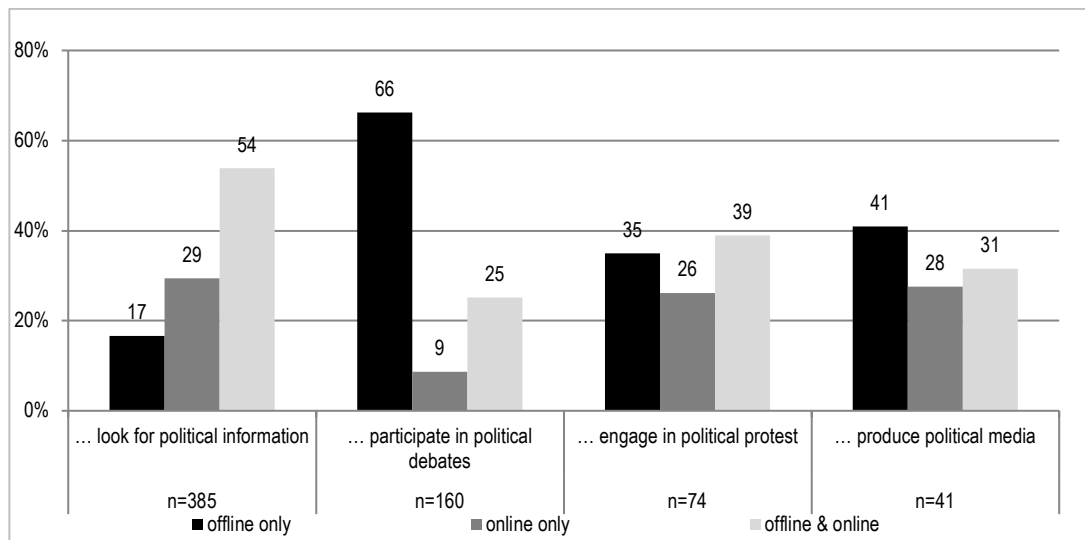
Although Switzerland is in the upper segment in various international ICT statistics, *indicators of a digital divide* are also apparent. 23% of the population did not use the Internet in 2011. The age gap is very pronounced between the 60+ age group on the one hand and younger generations on the other. The penetration of mobile Internet is most prevalent among particular population strata (upper income, with higher education). There is hardly any gender gap in Switzerland as regards Internet use in general, but women use it less intensively than men do. In recent years, the rate of growth has continuously decreased and the number of newcomers has been very low at 1%. Reasons for remaining unconnected vary, but the predominant argument for not using the Internet is a lack of interest (45%).

### Interest in politics and involvement

Internet access is a central factor for online political empowerment but the opportunities for digital democratization are also determined by people's interest in politics and their readiness for political participation. Interest in politics, for instance, 'can be considered a motivational prerequisite for participation, and also a crucial variable for understanding differences in information processing, learning and opinion formation' (Holt et al. 2013, 21). Altogether, people in Switzerland are predominantly interested in politics and they are partly engaged in political activities online (Latzner et al. 2012b). More than half of the Swiss population (59%) are *interested in politics*. 21% say they are very interested in politics and 38% are somewhat interested. Only 15% say that they are not interested in politics at all. There is no significant difference between Internet users and non-users regarding political interest and the interest of the Swiss population in politics is also partially reflected in *active political participation*. 40% of all respondents search for information on political issues, 17% engage in political discussions, 7% have been involved in some form of protest and 4% have produced political media during the last year. Internet users are more active in matters of political participation than non-users. Searching for information and joining political discussions, for example, are more widespread among Internet users than among non-users. However, the Internet does not play the same role for all forms of political participation. Figure 1 looks at the politically active Internet users and provides a differentiated picture regarding the relevance of online and offline modes of political participation.



Figure 1: Relevance of online and offline modes of political participation



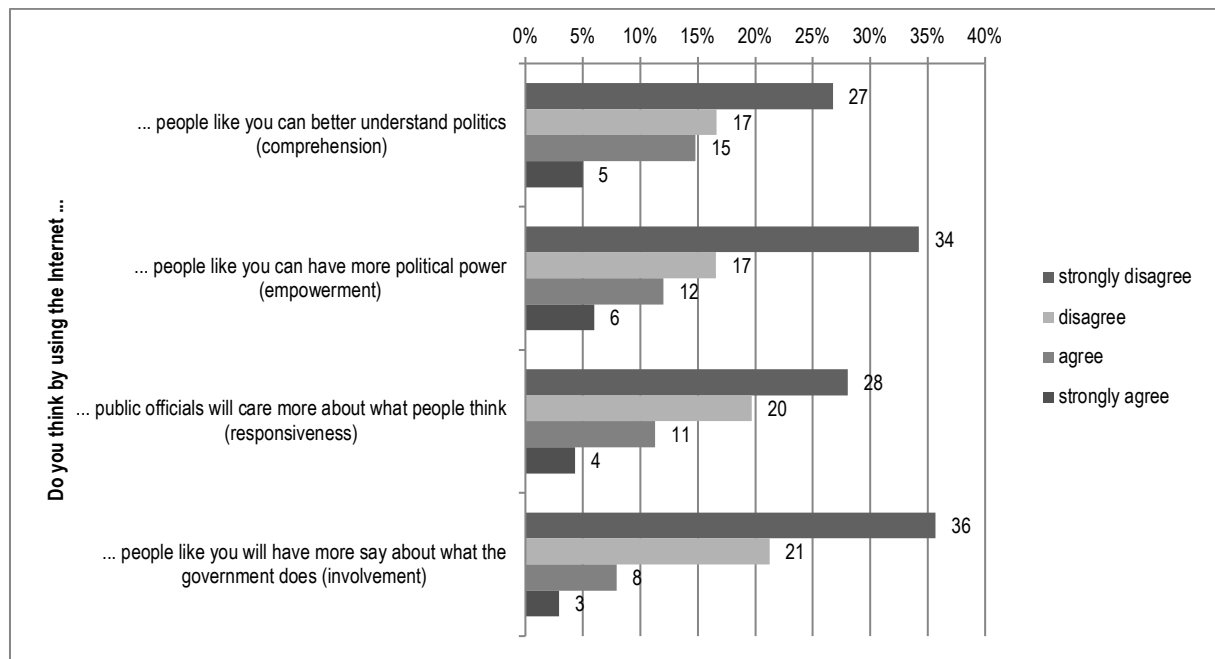
Source: Latzer et al. (2012b, 9). Database: N=851 Swiss Internet users (14+). The n for each item shows the number of responding Internet users who said they had carried out the respective activity during the last year. The bar graphs show the share of respondents who performed the respective activity online only, offline only or both, online and offline.

Results show that the importance of the Internet varies for different forms of political participation. The Internet is used considerably more for searching for political information than for participating in political discussions. 83% of politically active Internet users look up political information online, but only 34% participate in political discussions on the Internet. Thus even among Internet users who do in fact participate in political debates, two thirds (66%) discuss political issues exclusively offline. Altogether, ‘offline participation’ still plays a very important role for Internet users too. The Internet makes political participation easier, but online participation does not replace offline participation. One of the reasons why people in Switzerland prefer offline to online debates is that the Internet is not considered a safe place for the expression of personal political views. About half (46%) of Swiss respondents do not think it is safe to talk about politics on the web. One in five (22%) consider it safe to voice their views about politics online. In the US, for example, one in three (33%) feel safe expressing their political views online (Cole et al. 2011, 178).

## 2. The citizen's view of digital democratization

Internet penetration, interest in politics and political participation online are supposed to promote the democratic process and the quality of democracy. But what are the results of online engagement and how do people perceive the impact of the Internet on politics and democracy? In order to survey opinions on digital democratization, the survey asks four questions, each of which is related to the impact of Internet use on a relevant dimension of the quality of democracy: comprehension, responsiveness, involvement and empowerment. People are asked the extent to which they agree with the statements: Do you think that by using the Internet 'people like you can better understand politics' (comprehension), and 'public officials will care more what people like you think' (responsiveness). Moreover, people are asked the extent to which they agree to the statement that by using the Internet 'people like you will have more say about what the government does' (involvement) and 'people like you can have more political power' (empowerment). These questions capture important facets of digital democratization and the answers show the respondents' *perception* of the impact of the Internet on these dimensions, but not the *de-facto* impact. Altogether, these perceptions indicate a rather sceptical view of digital democratization in Switzerland (Figure 2).

Figure 2: Perception of digital democratization – the citizen's view from Switzerland



Source: Latzer et al. (2012b, 11): Database: N=1104 respondents representative of the whole Swiss population by gender, age and the three language regions. Respondents are asked the extent to which they agree with the respective statement on scale from 1 to 5.

At 3% to 6%, the number of people who strongly believe in positive democratic effects caused by the Internet is very low for each of the four items (comprehension, empowerment, responsiveness and involvement). Only a minority of the Swiss population take an optimistic view and agree or strongly agree with the positive statements on digital democratization. 11% believe in better political involvement, 18% believe that the Internet will promote citizens' empowerment and 15% believe that public officials will care more about what people think. One fifth (20%) of the respondents think that the Internet enhances people's understanding of politics – thus increased comprehension scores highest of the four items considered.

On the other hand, in each of the relevant dimensions more than 40% of the respondents do not believe that the Internet has any positive effect on the quality of democracy. The sceptical view is particularly pronounced with regard to political involvement. 56% do not think the Internet will give people more say in what the government does. The peculiarities of the

Swiss political system may provide an explanation for this. Instruments of direct democracy (i.e., referendums) are well developed in Switzerland. The opportunities for participation are already manifold in the analogue world. This provides a high-level benchmark for additional enhancements of involvement by digital means. Nevertheless, the dominant impression of rather strong scepticism regarding digital democratization remains, which calls for further explanation.

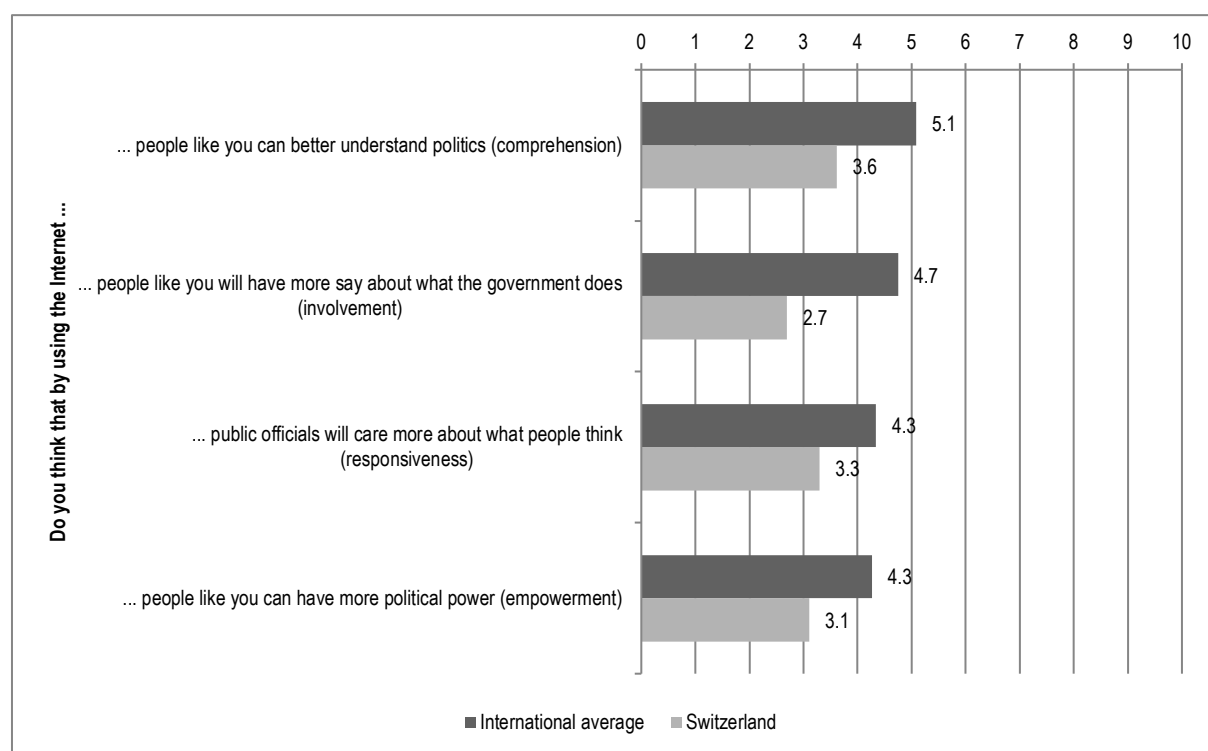
### **3. The perception of digital democratization – an index for international comparisons**

The following analysis is intended to confirm or reject the impression that the Swiss are sceptical about the impact of the Internet on digital democratization. Is Switzerland part of the global mainstream or an exception regarding people's view of digital democratization? An international comparative analysis sheds some light on this question. For this purpose, an index measuring the perception of digital democratization was established. This builds on comprehensive and standardized international survey data. In essence, it draws on the four above-mentioned questions, which tackle the different dimensions of the quality of democracy.

To construct the 'Perception of Digital Democratization Index,' the four variables are converted into an index on a scale of 0 to 10, with the higher values denoting greater belief in digital democratization. Hence the following formula is applied for the index calculation:  $((V_i - V_{min}) / (V_{max} - V_{min}) * 10)$ . The weightings for the initial variables are calculated using the principal components factor analysis. A similar procedure is used by Gwartney et al. (2005) in the construction of their Economic Freedom Index and by Dreher (2006) in calculation of the Index of Globalization. The principal components factor analysis is

suggested by Lockwood (2004) and Dreher (2006), when testing for the robustness of the Kearny/Foreign Policy Globalization Index and the KOF Swiss Economic Institute Index of Globalization. Based on the results of a principal component factor analysis, we have given equal weight to all four variables. 2011 is taken as a base year and the variance of the variables used is partitioned. The weights are then determined in a manner that maximizes the variation of the principal component. With this method, the index captures the maximum possible variation. Comparative results of the calculation based on the index are shown in Figure 3 and Figure 4.

Figure 3: Belief in digital democratization: Switzerland compared to the international average



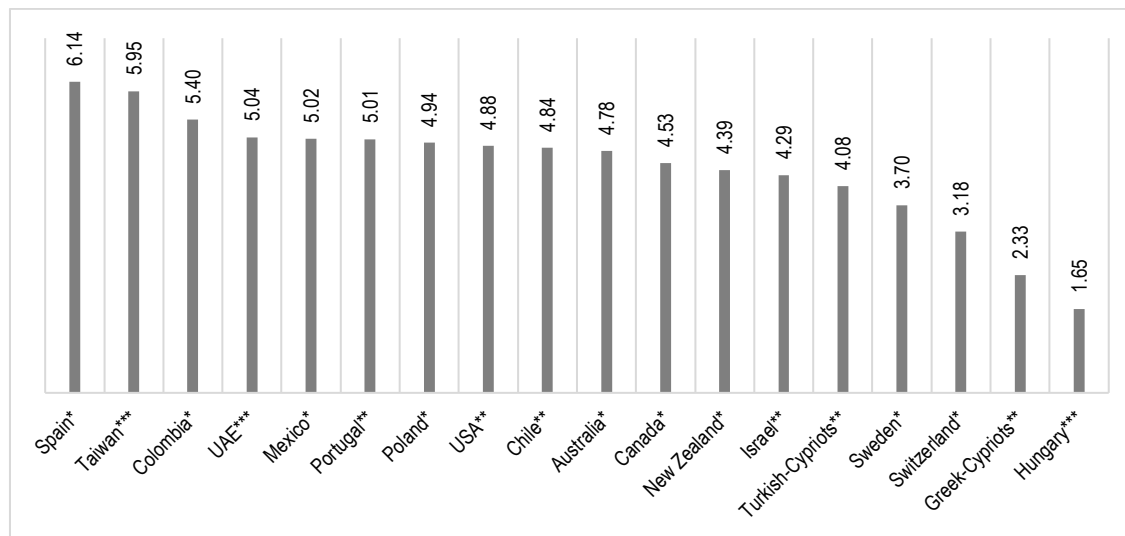
Calculations based on 14'307 observations in nine countries from national representative surveys conducted in 2011 (ES, CO, MX, PL, AUS, CAN, NZ, SE, CH).

The results of the international comparison confirm the impression that the people in Switzerland are rather sceptical about the impact of the Internet on digital democratization. Switzerland consistently ranks below the international average when people are asked if they

believe the Internet will result in better political comprehension, involvement, responsiveness and empowerment (Figure 3). The greatest gap between Switzerland and the international average arises on the question of whether the Internet gives people more say on what the government does. People in other countries are clearly more optimistic about increasing political involvement.

On the index scale, a score of 5 is interpreted as the benchmark that differentiates between the relative sceptics and relative optimists. All values above 5 points indicate relative optimism while values below 5 indicate relative scepticism of the majority of population in a given country. Hence the international data also point towards a slightly sceptical view of digital democratization in general. On the scale from 0 to 10, only the issue of political comprehension (at 5.1) achieves a score slightly above the 5-point threshold, while the figures for political involvement (4.7), responsiveness of public officials (4.3) and people's empowerment (4.3) are below this. Altogether, internationally this points to a slightly sceptical view regarding the impact of the Internet on the quality of democracy. But is this a common pattern or are there differences between different countries? Figure 4 shows an international comparison of the perception of digital democratization.

Figure 4: Perception of digital democratization – an international comparison



Calculations based on 22'733 observations in 18 countries from national representative surveys conducted in \*2011, \*\*2010 and \*\*\*2009. The comparative international analysis is based on an index that integrates the four dimensions of democratic quality (comprehension, responsiveness, involvement, empowerment) for each participating country.

The results of the international comparison again confirm the impression that the people in Switzerland are rather sceptical about the impact of the Internet on digital democratization. Together with Hungary (1.65), Cyprus/Greek-Cypriots (2.33) and Sweden (3.7), Switzerland (3.18) forms the block of the most sceptical nations on the Perception of Digital Democratization Index scale. In contrast, the proportion of optimists is particularly high in Spain (6.14) and Taiwan (5.95). Colombia (5.4) also scores clearly above the average. The value of the index lies in positioning individual countries in the global context. However, the results of the comparison do not suggest a simple common pattern across the countries studied. Most countries in the index (11 out of 18) score between 4.0 and 5.1. The belief in digital democratization is at a similar level for these countries, although the group of nations is heterogeneous – containing such different states as the US, Poland, Mexico and the United Arab Emirates. Obviously there is a general overall tendency towards ‘relative pessimism’, but there are also marked differences regarding the belief in digital democratization, as

shown, for instance, by the pronounced gap between the most optimistic country Spain (6.14) and most sceptical country Hungary (1.65). This inevitably raises the questions regarding the reasons for these gaps and for the optimistic and pessimistic attitudes to digital democratization.

#### **4. Towards explaining citizens' perceptions of digital democratization**

The final section takes a first step to exploring the reasons for the evident scepticism regarding digital democratization in Switzerland. It is guided by the following question: can factors related to sociodemographics, Internet usage and political interests explain belief or scepticism in digital democratization among the Swiss population? In order to identify the relevance of different influencing factors, it tests the data from Switzerland by a logistic regression.

Here particular attention is paid to pessimistic and more optimistic population strata. Although Switzerland is one of the nations with the lowest degree of belief in digital democratization, there is a comparatively small but interesting group of people who show a high degree of belief in digital democratization compared to the rest of the population. The paper therefore seeks to find the characteristics of this rather optimistic group. For this purpose, the following three hypotheses are tested:

H1. A general interest in news and information is positively associated with a greater belief in digital democratization.

H2. Active production of information is positively associated with a greater degree of belief in digital democratization.



H3. Active political participation in discussions and active production of political content are positively associated with a greater degree of belief in digital democratization.

#### **4.1 Measurement and Method**

The ‘Perception of Digital Democratization Index’ is the dependent variable in this assessment. Selected sociodemographic variables (income, age, gender, education) serve as control variables. The regression incorporates *Internet usage* variables covering a.) Internet experience in terms of the years of Internet usage, b.) the intensity of Internet usage in minutes per week, c.) the citizen’s opinion regarding the amount of reliable information on the Internet, and finally d.) self-reported Internet skills. A look at these variables should clarify whether greater Internet experience leads to a stronger belief in the transforming power of the Internet in the political domain.

Moreover, the model introduces three composite indices, which are designed to test the three working hypotheses. Based on principal component factor analyses,<sup>2</sup> the study selects several questions from the Swiss survey in order to construct three composite indices that display (1) activity in information seeking, (2) active content production, and (3) political activity. A look at these indices should clarify whether people with a strong affinity for information and great interest in politics have a greater belief in digital democratization. The composite index of *activity in information seeking* captures the frequencies a.) of using search engines, b.) of looking for local, national and international news, c.) of fact-checking online, and d.) of using online lexica such as Wikipedia. The index of *active content production* captures the frequencies a.) of work on blogs, b.) of participation in online forums, c.) of commenting on blogs and discussion boards and d.) of reading blogs. The composite index of *political activity* captures a.) looking for information on political issues, b.) participating actively in political

discussions, c.) engaging in political protest, and d.) producing political media, e.g. flyers or political blogs.

A logistic regression analysis is performed for the statistical inference of the Swiss population. Here the study employs only one dependent variable – the ‘Perception of Digital Democratization Index’. In order to discriminate between the more and less pessimistic population strata, the study splits the dataset into two categories. All those in the dataset ranking below 3.18 points on the index scale are considered ‘pessimists’ and all above the 3.18 points are considered ‘relative optimists’. 3.18 points represents the mean of the Index for the Swiss population and provide a suitable level for the partition with an almost equal division (53.2% pessimists; 46.8% relative optimists).

## **4.2    Results**

A binary multivariate logistic regression analysis is conducted for the statistical inference of the Swiss population. The independent variables are regressed on the Perception of Digital Democratization Index. Table 1 summarizes the results of the logistic regression.

Table 1: Logistic regression results: Explaining perceptions of digital democratization

'Perception of Digital Democratization Index'	Coef.	Std. Err.	z	P>z	[95% Conf. Interval]	
Age						
30-44	.3642941	.2755898	1.32	0.186	-.175852	.9044401
45-59	-.2735968	.2900767	-0.94	0.346	-.8421366	.294943
60 and above	-.5397465	.329908	-1.64	0.102	-1.186354	.1068614
Gender						
Gender	-.3253245	.19037	-1.71	0.087	-.6984429	.0477939
Education						
Middle	.7289618	.463328	1.57	0.116	-.1791443	1.637068
High	.326863	.4791387	0.68	0.495	-.6122315	1.265958
Income						
4.500-7000 CHF	-.0441276	.3150049	-0.14	0.889	-.6615259	.5732707
7.001-9.000 CHF	-.1091925	.3295153	-0.33	0.740	-.7550306	.5366455
9.0001-12.000 CHF	-.096693	.3561122	-0.27	0.786	-.7946602	.6012741
Above 12.000	-.3411532	.3731934	-0.91	0.361	-1.072599	.3902925
Internet usage						
a. Experience: Years online	.0579755	.2336036	0.25	0.804	-.3998791	.5158301
b. Intensity of Internet use: Time spent online	.0902709	.201367	0.45	0.654	-.3044011	.484943
c. Perceived reliability of the Internet as an information source						
Half of the information reliable	.3121251	.2996944	1.04	0.298	-.2752651	.8995153
Most or all of the information reliable	.6053042	.3016655	2.01	0.045	.0140507	1.196558
d. Self-reported web skills	-.0416481	.2310422	-0.18	0.857	-.4944825	.4111863
Composite indices						
1. Activity in information seeking	.2829695	.2113822	1.34	0.181	-.131332	.6972709
2. Active content production	.1058781	.2249594	0.47	0.638	-.3350343	.5467905
3. Political activity	.558857	.2530384	2.21	0.027	.062911	1.054803
_cons	-.9065017	.5774063	-1.57	0.116	-2.038197	.2251939

Number of observations = 539, LR chi2 (18) = 43.14; Prob > chi2 = 0.0008, Pseudo R2 = 0.0578, Log likelihood = -351.69907

The logistic regression shows that sociodemographic variables have no significant influence on the perception of digital democratization. While it is widely recognized that

sociodemographic factors play a very important role in explaining several aspects of a digital divide, they do not have an impact on people's perceptions of digital democratization.

Also the variables related to Internet usage cannot explain the belief in digital democratization.<sup>3</sup> Citizens' opinions on the impact of the Internet on democratic quality do not depend on the time people spend online, on their Internet experience in terms of years online, the self-reported web skills of Internet users or the perceived reliability of the Internet as an information source. There is no evidence that various aspects of Internet experience and greater trust in Internet content lead to a stronger belief in the transforming power of the Internet in the political domain.

This study's first hypothesis suggests that general interest in news and information is positively associated with a greater belief in digital democratization. By using the composite index *activity in information seeking*, the study tests its effects on the Perception of Digital Democratization Index. Results show that this variable has no significant influence on the belief in digital democratization.

The second hypothesis suggests that active content production is positively associated with a greater belief in digital democratization. The empirical assessment, however, reveals that *active content production*, as measured by the composite index, does not have any influence on the perception of digital democratization either.

The third hypothesis suggests that active participation in political discussions and production of political content is positively associated with a greater belief in digital democratization. Using the third composite index on political activity the results examine the effect of political interest and activity on the perception of digital democratization. The results demonstrate that people who actively search for political information, participate in political discussions, write protest letters, participate in protest groups or produce political content tend to have a greater

belief in a positive impact of the Internet on democratization. Post-estimation tests, which were performed after the logistic regression, indicate that the overall effect of the variable political activity is significant.<sup>4</sup>

## **Conclusions**

This paper makes an empirical contribution to the analysis of digital democratization. A national representative survey of Switzerland shows that people are predominantly interested in politics and to a small extent also engaged in politics online. But the survey also reveals the impression that people in Switzerland are largely sceptical regarding the impact of the Internet on political empowerment and involvement and regarding the impact of the Internet on people's comprehension of politics and the responsiveness of public officials.

An international comparison of 18 countries based on a newly developed 'Perception of Digital Democratization Index' confirms the impression that people in Switzerland are rather sceptical about the impact of the Internet on democratization. Together with Hungary, the Greek-Cypriots and Sweden, Switzerland forms the block of the most sceptical nations. But scepticism towards digital democratization is not a Swiss particularity. Comparative international data show that the people's belief in the impact of the Internet on the quality of democracy is rather limited in general. Individual countries, such as Spain and Taiwan, however, stand out from this predominantly sceptical line.

The analysis finally explores the reasons for pessimistic and optimistic perceptions of digital democratization in Switzerland. A binary multivariate logistic regression shows that neither sociodemographic factors nor factors related to Internet usage affect this belief. However, the results indicate that a relevant aspect for believing in digital democratization is a genuine interest in politics and de-facto political participation on the Internet. This phenomenon is

robust, independently of age, income, education level and gender as well as of self-reported web skills and other Internet-related activities. Interest in politics and active participation in politics are positively associated with the belief in digital democratization while scepticism is evident primarily in the politically inactive population strata. The politically active, involved citizens have a greater belief in digital democratization than the rather passive ones. Their greater belief in digital democratization indicates that the active citizens do not seem to be disenchanted.

The results raise the question of implications for further research and political practice. As for Switzerland, the results point to significant barriers for wide online political participation. The Internet is not considered a safe place for the expression of personal political views, citizens are largely sceptical regarding a positive impact of the Internet on the quality of democracy, and only a minority actively participates in politics online. Scholars and politicians need to consider citizens' caution, scepticism and limited participation as central factors of influence on the status and progress of electronic democratization in Switzerland. But does this have a negative impact on Swiss democracy? One has to bear in mind that, besides the new online opportunities, Switzerland can call on extremely well-developed traditional instruments of direct democracy (i.e., referendums). The opportunities for participation are already manifold in the analogue world. This provides a high-level benchmark for additional enhancements of involvement by digital means. Citizens' scepticism towards further digital democratization may therefore be rooted in deep satisfaction with long-established instruments of direct democracy.

The international comparison shows interesting differences between the countries studied through the index. However, the lack of longitudinal analysis and the lack of explanation for these differences at international level point to the need for further qualitative and quantitative research. The Swiss case reveals that sociodemographic factors do not play a role, while

political participation affects the belief in digital democratization. But it is unlikely that this is the only influential factor and common global pattern. Additional explanatory variables for further research may, for example, include the general trust in politics and political/societal institutions, people's satisfaction with national politics, the current political and economic situation in a country at the time of the survey (e.g., significant crises). Very important explanatory variables may therefore be available beyond the scope of available comparable surveys. Further research may clarify whether and to what extent there are general explanatory patterns across the countries or if divergence is rooted predominantly in national particularities.

## Endnotes

<sup>1</sup> Swiss population 14+, n=1104, representative according to age, gender and three language regions, CATI interviews, confidence interval +/- 2.95, confidence level 95%.

<sup>2</sup> The variables were chosen after performing a principal component factor analysis to represent users who actively engage in information seeking, content production and political activities. The variables for information seeking and content production are based on ordinal scales. 1. several times a day, 2. daily 3. weekly, 4. monthly 5. less than monthly and 6. never. After finishing the principal component factor analysis, equal weights are given to all variables in question. The variables for political activity are based on nominal scales. Possible answers in this block were 1. no, 2. yes, only offline, 3. yes, only online, 4. yes, offline and online. In order to construct a composite index a principal components factor analysis was applied. After the analysis was performed, equal weights were given to the four questions.

<sup>3</sup> Although the p. value of the variable “perceived reliability of Internet as an information source” is close to zero, the post-estimation results show that the overall effect of the variable on the perception of digital democratization is not significant.

<sup>4</sup> Post-estimation test results show that the results are significant within one degree of freedom and  $\chi^2(1) = 4.88$  and  $\text{Prob} > \chi^2 = 0.0272$ .



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